IN THE SPECIFICATION:

Please amend paragraph [0034] in the specification as follows:

[0034] The next step is to acquire fluorescence image data of each reference sample with the measurement system 100 (step S204). White light is emitted from the Xe lamp 10a and filtered by the band-pass filter 22, and each reference sample is illuminated with the ~~white~~ filtered light through the band-pass filter 22. This excites the fluorescent dye in the reference sample to generate fluorescence. The light having passed the band-pass filter 22 has a wavelength spectrum that can excite all the reference samples.

Please amend paragraph [0066] in the specification as follows:

[0066] In the present embodiment, therefore, four or more types of fluorescent dyes are measured with a 3-band camera 30 as in the first and second embodiments. As described previously, the multiband camera 30 has the two sensitivity modes, the Low Light mode and the High Light mode. The ~~Low~~ High Light mode is a mode in which the standard sensitivity characteristic is set in each detection wavelength band, and the ~~High~~ Low Light mode a mode in which a sensitivity characteristic a little higher over all sensitivities than that in the ~~Low~~ High Light mode is set in each detection wavelength band. In both of the Low Light mode and the High Light mode, portions of the detection wavelength bands overlap any adjacent bands. This multiband camera 30 has two analog circuits having different gains in all the detection wavelength bands. A circuit with a low gain in the entire detection wavelength band is used in

the High Light mode, and a circuit with a high gain in the entire detection wavelength band is used in the Low Light mode.

Please amend paragraph [0068] in the specification as follows:

[0068] The 6×6 matrix of the first term on the right-hand side in Eq (11) is the basic data $\mathbf{J}_1$ in the present embodiment. Namely, the following equation holds.

[Formula 16]

$$\boldsymbol{J}_1 = \begin{bmatrix} \int_\lambda f_1 \cdot r_\ell \cdot d\lambda & \int_\lambda f_2 \cdot r_\ell \cdot d\lambda & \cdots & \cdots & \cdots & \int_\lambda f_6 \cdot r_\ell \cdot d\lambda \\ \int_\lambda f_1 \cdot g_\ell \cdot d\lambda & \int_\lambda f_2 \cdot g_\ell \cdot d\lambda & \cdots & \cdots & \cdots & \int_\lambda f_6 \cdot g_\ell \cdot d\lambda \\ \int_\lambda f_1 \cdot b_\ell \cdot d\lambda & \int_\lambda f_2 \cdot b_\ell \cdot d\lambda & \cdots & \cdots & \cdots & \int_\lambda f_6 \cdot b_\ell \cdot d\lambda \\ \int_\lambda f_1 \cdot r_h \cdot d\lambda & \int_\lambda f_2 \cdot r_h \cdot d\lambda & \cdots & \cdots & \cdots & \int_\lambda f_6 \cdot r_h \cdot d\lambda \\ \int_\lambda f_1 \cdot g_h \cdot d\lambda & \int_\lambda f_2 \cdot g_h \cdot d\lambda & \cdots & \cdots & \cdots & \int_\lambda f_6 \cdot g_h \cdot d\lambda \\ \int_\lambda f_1 \cdot b_h \cdot d\lambda & \int_\lambda f_2 \cdot b_h \cdot d\lambda & \cdots & \cdots & \cdots & \int_\lambda f_6 \cdot b_h \cdot d\lambda \end{bmatrix} \quad (12)$$

The six components in the first column of the matrix $\mathbf{J}_1$ represent the R, G, and B values of the multiband camera 30 obtained by measuring intensities of the fluorescence in the unit concentration of the first fluorescent dye in the Low Light mode and in the High Light mode of the multiband camera 30. Similarly, the six components in each of the second to ~~fifth~~ sixth columns of the matrix $\mathbf{J}_1$ represent the R, G, and B values of the multiband camera 30 obtained by measuring intensities of fluorescence in the unit concentration of each of the second to sixth fluorescent dyes in the Low Light mode and in the High Light mode of the multiband camera 30. Therefore, all the components in the matrix $\mathbf{J}_1$ can be determined by measuring the fluorescence

emitted from the first ~~and second~~ to sixth reference samples in both of the Low Light mode and the High Light mode of the multiband camera 30.